

REMARKS

Claims 41-43 are presented in the present application. No claims have been allowed. Claim 42 has been amended to more positively recite the novel features of the present invention. This amendment to claim 42 does not recite any new subject matter and support can be found, among other places, at page 13, lines 5-21, of the specification as well as in the originally filed claims and drawings. In addition, claims 42 and 43 have been amended to depend directly from claim 41. Applicant respectfully requests admission of amended claims 42 and 43.

Claims 42 and 43 have been objected to because they depend from claim 1. The Examiner has deemed this to be a typographical error and has treated them as being dependent from claim 41. Claims 42 and 43 have been amended so that each depends directly from claim 41.

Claim 42 has been rejected under 35 U.S.C. 112, first paragraph, for failing to comply with a written description requirement as discussed in paragraph 3 of the Office Action. More particularly, Examiner states that there is no recitation of "an offset angle" in page 18, line 21, through page 19, line 19, of the specification. Claim 42 has been amended to recite that the outer major surfaces of the laminate within the second predetermined area form a wedge angle of at least about 0.0115° . Discussion of the wedge angle can be found at page 13, lines 5-21, of the specification. Furthermore, page 19, lines 7-19, of the specification discusses an embodiment of the invention shown in Fig. 6, and in particular recites a range of thicknesses for both the constant thickness area 439 of the interlayer and a range of thicknesses for the lower edge of the interlayer. More specifically, the interlayer can have a constant thickness of about 0.034 to 0.040 inches and the lower edge of the interlayer has a thickness of about 0.027 to 0.030 inches. Assuming a tapered distance of 20 inches based on the subsequently disclosed example in the specification (see page 19, lines 12-19), the minimum wedge angle that can be formed by the interlayer is 0.0115° ($\text{arc tan}[(0.034-0.030)/20]$). Based

on the above, Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. 112.

Claims 41 and 43 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 4,943,104 to Woodard et al. (hereinafter Woodard), as discussed in paragraph 5 of the Office Action. Applicant respectfully traverses this rejection.

Woodard discloses an optical element for a vehicle windshield wherein an interference filter having a gradient band is applied to an interlayer that is laminated between two glass plies. The gradient band portion of the filter is positioned in an upper, non-vision area of the windshield and includes a metal layer that increases in thickness toward the edge of the windshield.

Claim 41 recites an automotive transparency comprising a first glass ply having a constant thickness, a second glass ply having a constant thickness, and an interlayer having a constant thickness in a first predetermined area and a decreasing thickness in a second predetermined area. The first and second plies are secured together by the interlayer to form a laminate having a first outer major surface and opposing second outer major surface. A first predetermined area of the laminate is defined by the first predetermined area of the interlayer. The outer major surfaces of the glass plies are substantially parallel to one another within this first predetermined area. A second predetermined area of the laminate is defined by the second predetermined area of the interlayer and the outer major surfaces of the glass plies within this second predetermined area are nonparallel to each other. Furthermore, these outer major surfaces are nonparallel in the second predetermined area such that images reflected off these nonparallel surfaces of the laminate are substantially superimposed over each other to at least reduce double imaging of the reflected image. There is nothing in Woodard that anticipates the automotive transparency as recited in claim 41. More particularly, claim 41 recites an interlayer having a first predetermined area with a constant thickness and a second

predetermined area with a decreasing thickness. There is no corresponding element in Woodard. The interlayer in Woodard has a constant thickness. It is noted that the Examiner refers to the interlayer in Woodward as numerals 14 and 24 but Applicant believes that this is not correct. Numerals 14 and 24 refer to the metal film of the coating (see column 3, lines 32-56, of Woodward) and not the interlayer. The only element in Woodard which varies in thickness is the coating applied to the plastic ply of the interlayer, and in particular the metal film 14 of the coating; the thickness of the interlayer itself does not change over its entire length. Furthermore, and only for the purposes of this specific discussion, if one were to consider plies 44, 46, 40 and the interference filter together as the "interlayer", this configuration is still different from and does not anticipate the interlayer as recited in claim 41. More particularly, the interlayer in claim 41 has a constant thickness in a first predetermined area and a decreasing thickness in a second predetermined area whereas the multilayered interlayer configuration of Woodard has a first portion with a constant thickness and a second portion with an increasing thickness. As a result, Woodard does not disclose interlayer element as recited in claim 41.

Furthermore, claim 41 recites that the outer major surfaces of the automotive transparency within the second predetermined area are nonparallel such that the images reflected off the nonparallel surfaces of the laminate are substantially superimposed over each other to at least reduce double imaging of the reflected image. This is nothing in Woodard that anticipates a construction as recited in claim 41. More particularly and as discussed earlier, it is the metal layer 14 in Woodard which increases in thickness to provide the gradient band of the interference filter. Referring to column 4, lines 51-57, of Woodward, this layer 14 can increase from a thickness of 60 Å up to 1000 Å, or a change in thickness of 940 Å. This maximum change in thickness is equivalent to 3.7×10^{-6} inches. Applicant asserts that the thickness change of the coating applied to the interlayer is

many orders of magnitude less than the thickness of either the interlayer or the glass and has essentially no effect on the overall thickness of the laminate. As a result, the outer major surfaces of the laminate in the area of the gradient band of the interference filter in Woodard will remain substantially parallel to each other and are not configured so that images reflected off the outer major surfaces of the laminate in this area are superimposed over each other as expressly recited in claim 41.

Since Woodard does not teach each and every element of claim 41 and, more particularly, an interlayer having a constant thickness in a first predetermined area and a decreasing thickness in a second predetermined area and furthermore does not teach that the outer major surfaces of the laminate are nonparallel to each other such that images reflected off the nonparallel surfaces in the second predetermined area of the laminate are substantially superimposed over each other, claim 41 is not anticipated by and is patentably distinguishable over Woodard.

Claim 43 depends directly from claim 1 and further recites that the automotive transparency is an automotive windshield. Applicant has discussed earlier how claim 41 is not anticipated by Woodard and claim 43 is similarly not anticipated.

Claim 42 has been rejected under 35 U.S.C. 103(e) as being unpatentable over Woodard as discussed in paragraph 7 of the Office Action. More particularly, Examiner recognizes that Woodard does not teach a specific offset angle but alleges it would be obvious to one of ordinary skill in the art to vary the angle as specified in claim 42. Applicant respectfully traverses this rejection.

Claim 42 depends directly from 41 and recites that the outer major surfaces of the laminate within the second predetermined area form a wedge angle of at least about 0.0115° . Applicant has discussed earlier how claim 41 is not anticipated by Woodard and there is nothing in Woodard which teaches or discusses, either implicitly or explicitly, providing any offset at all between

the opposing surfaces of the laminate in order to superimpose images reflected off the outer surfaces of the laminate substantially on top of each other to at least reduce double imaging of a reflected image. More specifically, as discussed above, the change in thickness provided by the variation in metal film thickness of the interference filter disclosed in Woodard is a maximum of 3.7×10^{-6} inches. Presuming that the gradient band of the interference filter extends for a distance of 10 inches (represented by numeral 29 in Fig. 1 in Woodard), the resulting wedge angle of the outer major surfaces of the glass is 0.0000212° . If this distance is increased to 20 or 30 inches, the corresponding wedge angles would be 0.0000106° and 0.00000707° , respectively. These angular offsets are clearly several orders of magnitude smaller than the wedge angle of 0.0115° recited in claim 42. Woodard teaches a gradient interference filter and there is nothing in the reference that deals with the angular offset between opposing outer major surfaces or establishing a wedge angle between opposing outer surfaces of a laminate to eliminate double imaging. As a result, it would not be obvious based on Woodard to simply vary the angle as disclosed in Woodward to the angle as recited in claim 42. As a result, claim 42 is patentably distinguishable over Woodard.

Claims 41-43 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6-11 of U.S. Patent No. 6,636,370 as discussed in paragraph 8 of the Office Action. Enclosed with this amendment is a Terminal Disclaimer that should overcome this rejection.

Based on the above, Applicant respectfully requests consideration of amended claims 42 and 43, reconsideration of claim 41 and allowance of claims 41, 42 and 43.


Applicant believes the present case is now in condition for allowance of all claims and such action is respectfully requested. If there are any issues left to be resolved, the Examiner is requested to contact Applicant's attorney at the telephone number provided below.

Respectfully submitted,

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